This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Cancel)

Claim 2 (Previously Presented): An axial piston compressor according to claim 16, characterised in that

the swash plate is a swash ring (107).

Claim 3 (Previously Presented): An axial piston compressor according to claim 16, characterised in that

the quotient moment of inertia/mass "J/m" of the swash plate (107) or of the pivotal part thereof is at least about 250 gmm^2/g, especially greater than 400 to 500 gmm^2/g, higher values being selected when the piston masses are greater than 40 g/piston, and the moment of inertia "J" being calculated in relation to each axis through the centre of gravity of the swash plate or of the pivotal part thereof.

Claim 4 (Previously Presented): An axial piston compressor according to claim 3, characterised in that

the swash plate or the pivotal part thereof is made from a material having a density of at least 6 - 8 g/cm^3.

Claim 5 (Currently Amended): An ~~Axial~~ <u>axial</u> piston compressor according to claim 16, characterised in that

the swash plate (107) or the pivotal part thereof is made from two or more disparate materials governing the mean radius for the calculation of the mass moment of inertia, the disparate materials being separated from one another radially and/or axially,

especially so that in the case of a swash ring (107) an outer (107a) or inner partial ring is made from a first material ~~(107l)~~ (107i), for example a material of relatively high density, such as lead or the like, inside an outer (113) or inner circumferential groove of an inner (107i) or outer partial ring, which is made from relatively hard and wear-resistant material such as, for example, steel, ceramic material or the like.

Claim 6 (Previously Presented): An axial piston compressor according to claim 16, characterised in that

the swash plate (107) or the pivotal part thereof has, in relation to each centre of gravity axis, a mass moment of inertia "J" greater than 100,000 g/mm^2, especially greater than 200,000 to 250,000 g/mm^2.

Claim 7 (Previously Presented): An axial piston compressor according to claim 16, characterised in that

the pistons each have a mass of about 30 g to 90 g, especially 35 g to 50 g.

Claim 8 (Previously Presented): An axial piston compressor according to claim 16, characterised in that

the mean radius and/or the mean height of the swash plate or of the pivotal part thereof is/are so dimensioned that the centrifugal forces occurring on rotation of the swash plate (107), which forces counteract the pivotal movement of the swash plate (107), are greater than the forces acting on the swash plate from the pistons, which forces cause further extending pivotal movement, so that with increasing speed of rotation the piston stroke is reduced by an amount such that an approximately constant delivered quantity is established.

Claim 9 (Previously Presented): An axial piston compressor according to claim 16, characterised in that

the centre of gravity of the swash plate (107) or of the pivotal part thereof is located in or at least close to the axis of the drive shaft (104), where especially also the centre of the tilt-providing articulation is located.

Claim 10 (Previously Presented): An axial piston compressor according to claim 5, characterised in that,

when the swash plate (107) or the pivotal part thereof is made from a plurality of materials of different densities, the radially outer parts (107a) consist of denser material than the radially inner parts (107i).

Claim 11 (Previously Presented): An axial piston compressor according to claim 2, characterized in that,

when the swash plate is in the form of a swash ring (107), the inner and outer diameters are each selected maximally within the external conditions (for example, inner diameter of the drive mechanism space, sufficient support for the sliding blocks of an articulated arrangement effective between the pistons and swash plate, etc.).

Claim 12 (Previously Presented): An axial piston compressor according to claim 5, characterised in that,

when the swash plate is made from at least two materials of different densities, one material has a density of 6 - 8 g/cm^3, whereas the other material has a density greater than 6 - 8 g/cm^3.

Claim 13 (Previously Presented): An axial piston compressor according to claim 16, characterised in that

the quotient $M_{sw}/M_{k,ges}$ is ≥ 1, M_{sw} being the moment due to the moment of deviation of the swash plate and $M_{k,ges}$ being the moment due to the mass forces of the masses moved in translation (pistons).

Claim 14 (Previously Presented): An axial piston compressor according to claim 16, characterised in that

the quotient of the mass inertia of the swash plate in relation to the y axis, that is to say an axis perpendicular to the z or drive shaft axis, and the total piston mass "$J_y/m_{k,ges}$" is at least about 250 - 300 g mm^2/g for the case where

$m_{sw}/m_{k,ges} = 1$, wherein:

m_{sw} = mass of the swash plate (= rotating mass)

$m_{k,ges}$ = mass of all pistons, including sliding blocks (= translational mass).

Claim 15 (Previously Presented): An axial piston compressor according to claim 2, characterised in that

the distance "R" between the piston axis and drive shaft axis results from the relation

$$R = (r_a + r_i)/2$$

wherein

r_a = outer radius of the swash ring (107), and

r_i; = inner radius of the swash ring (107).

Claim 16 (Previously Presented): An axial piston compressor for the air-conditioning system of a motor vehicle, said compressor comprising:

a housing, and,

a compressor unit operative to draw in and compress a coolant, said compressor unit being arranged in said housing and arranged to be driven by means of a drive shaft, said compressor unit comprising pistons adapted to move axially back and forth in a cylinder block and comprising a swash plate operative to drive said pistons and rotate together with said drive shaft, wherein for a predetermined mass of the swash plate moved in rotation on the one hand and/or a particular mass moved in translation (for example, pistons, piston rod and/or sliding blocks) on the other hand, the mean radius governed by the geometry and/or by the density distribution and/or the mean height of the

swash plate or of the pivotal portion thereof is/are so selected that the centrifugal forces occurring on rotation of the swash plate are sufficient to counteract the pivotal movement of the swash plate to provide deliberate regulation and thereby to influence, especially to reduce or to limit, the piston stroke and, consequently, the quantity delivered.